

## FCC Information

This device generates and uses radio frequency (RF) energy, and if not installed and used properly, this equipment may cause interference to radio and television reception.

This equipment has been type tested and found to comply with the specifications in Subpart J of Part 15 of FCC Rules. These rules are designed to provide reasonable protection against radio and television interference in a residential installation. However, there is no guarantee that interference will not occur in particular installations.

If this equipment does cause interference to radio or television reception (which you can determine by turning the equipment off and on), try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna (that is, the antenna for the radio or television that is "receiving" the interference).
- Move the unit away from the equipment that is receiving interference.
- Plug the unit into a different wall outlet so that the unit and the equipment receiving interference are on different branch circuits.

If these measures do not eliminate the interference, please consult your dealer or an experienced radio/television technician for additional suggestions.

Also, the Federal Communications Commission has prepared a helpful booklet, "How To Identify and Resolve Radio TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, DC 20402. Please specify stock number 004-000-00345-4 when ordering copies.

### For Your Safety

The AC power plug is polarized (one blade is wider than the other) and only fits into AC power outlets one way. If the plug won't go into the outlet completely, turn the plug over and try to insert it the other way. If it still won't fit, contact a qualified electrician to change the outlet, or use a different one. **Do not attempt to bypass this safety feature.** 

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

### For Your Records

In the event that service should be required, you may need both the model number and the serial number. In the space below, record the date and place of purchase, and the serial number:

Model No.

Remote Control No.

Date of Purchase

Place of Purchase

Serial No.

### **Service Information**

This product should be serviced only by those specially trained in appropriate servicing techniques. For instructions on how to obtain service, refer to the warranty included in this Guide

WARNING: TO PREVENT FIRE OR ELECTRICAL SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.



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### **Unpacking the Receiver**

For RT2500 & RT2500R, check that you received the following items:

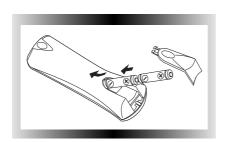
- · one receiver unit;
- one RCA Universal Remote Control (CRK76);
- one external FM Dipole antenna;
- one external AM loop antenna;
- one audio cable (two wires) with red and white RCA connectors:
- one video cable (single wire) with yellow RCA connectors;
- one instruction book;
- · one safety leaflet;
- · and one pair of AA batteries.

For RT2500, you also received:

- one set of spearkers including 2 left and right front speakers, 1 centre speaker, 1 subwoofer and 2 left and right rear speakers.
- 6 speaker cables including:
  - 2 x red/ balck cable for front speakers,
  - 1 x blue/ black cable for centre speaker,
  - 1 x brown/ black cable for subwoofer &
  - 2 x grey/ black cable for rear speakers.

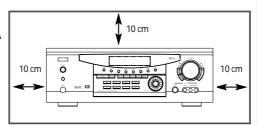
## Inserting Batteries into Remote Control

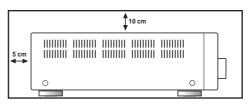
Insert two AA(R6) batteries according to the + and - signs on the battery compartment. To use the remote control, point it directly at your receiver.



# Set up and Maintenance of the Receiver

• Provide spaces for sufficient ventilation as indicated:





- Do not connect to the AC power cords until all connections are completed.
- Do not use your set immediately after transferred from a cold place to a warm place: there is risk of condensation.
- Do not expose your set to water projections and excessively high temperatures.
- After having disconnected your set, clean the case with a soft cloth, or with a slightly humid chamois leather. Never use strong solvents.

# Connecting to Audio-Visual Components

This receiver allows you to connect to a large variety of audio or video components.

### Before you Connect

- Protect components from power surges.
- Connect all components before plugging any power cords into the wall outlet.
- Always turn off the receiver and/or components before you connect or disconnect any cables.
- Contact consumer relations if you have questions concerning the connections or components.

**Note:** Always make sure that color-coded pins match the color of the terminals in which they are inserted. The connection cable plugs and jacks are color-coded as follows:

Speaker Terminals: RT 2500 - Red/Black (Main Speakers), Blue/Black (Center Speaker), Grey/Black (Rear Speakers) and Brown/Black (subwoofer).
RT2500R - Red/ Black (Main, Center & Rear Speakers)

**RCA Type Terminals**: Red for the right (R) channel. White for the left (L) channel. Yellow for the video. Black for the powered subwoofer.

### Positioning the Cables

Cables should be positioned correctly to avoid audio hum or interference. Below are a few suggestions:

- Insert all cable plugs into their jacks firmly.
- Place audio/video cables to the sides of the receiver's back panel instead of straight down the middle after you have connected the components.
- Try not to coil any power cables and keep them away from the audio/video cables as much as possible.
- Make sure all antennas and cables are properly grounded.

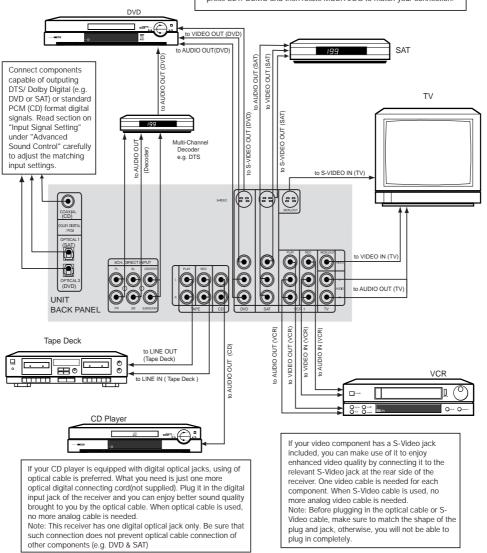
### Protect your Components from Overheating

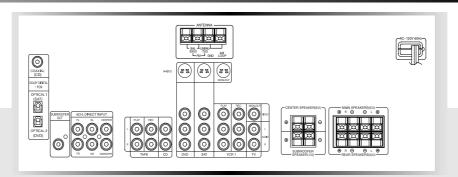
- Do not block ventilation holes in any component.
   Arrange the components so that air can circulate freely.
- Do not stack components directly on top of each other
- Allow adequate ventilation when placing your components in a stand.
- Place an amplifier near the top shelf of the stand so heating air rising from it will not affect other components. If you have a satellite receiver, you should place it on the top shelf.



### Connecting to Audio-Visual Components

Remark: If you have a video camera, video game machine, or an extra VCR, connect it to VCR 2 jack at the front of the receiver If you have a SAT receiver or DVD player, you can make use of an optical digital connecting cord (not supplied) or coaxial digital connecting cord (not supplied) to enjoy DTS/ Dolby Digital sound quality. One optical / coaxial cable is needed for each SAT receiver / DVD player. When optical or coaxial cable is used, no more analog cable is needed. Note: This receiver provides one optical and one coaxial digital input for the connection of your auxiliary components. Please connect your components (e.g. DVD, SAT or CD) to the appropriate digital inputs and press SET/ DEMO and then rotate MULTI JOG to match your connection.

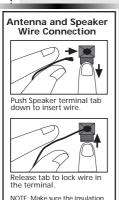




### **Connecting the Antennas**

The AM and FM antennas connect to the AM and FM terminals on the system's back panel. They must be hooked up in order to receive clear reception. Uncoil the antenna wires and locate the bare ends. Press down on the tab to open the terminal and insert the wire. Snap the tab closed. After connect-

ing the antennas, extend them to their full length and adjust their positioning for better reception.



NOTE: Make sure the insulation is completely removed from the ends of the Antenna and speaker wires at all connection points.

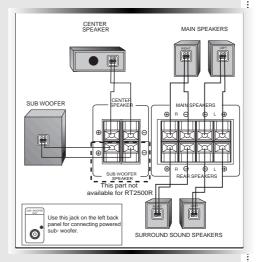
## Connecting the Speakers

At least two front speakers (left and right) are required. For better sound quality, Center speaker, rear speakers and Subwoofer are preferred. Adding center and rear speakers will enhance surround effects. Adding a Subwoofer will increase bass response.

If you want to enjoy full range of sound effects, with small speakers, it is a must to use the subwoofer with the speakers to maintain adequate bass signal for the surround sound effect.

Speaker cords, 1 for each speaker, are needed for connection. Twist the stripped ends of speaker cord about 2/3 inch (15 mm). Press down on the tab to open the terminal and insert the wire. Snap the tab closed. To ease speaker connections, the speaker cords and the terminals are color-coded into:

Red/Black (Main Speakers), Blue/Black (Center Speaker) and Grey/ Black (Rear Speakers). When connecting the speakers, make sure the colors of speaker wires and terminals are matched. If the cords are reversed, the sound will be distorted and will lack hass



### Connecting the Subwoofer

For RT2500, connect the subwoofer with the audio cord (brown/ black) provided. For RT2500R, or if you want to connect your own powered subwoofer, a monoaural audio cord (not supplied) is needed.

This receiver offers a high flexibility for user to use a large variety of speakers and subwoofers. For more information please refer to section "Fine Setting of the Speakers" in "Advanced Sound Control" on page 12.

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### **Positioning your Speakers**

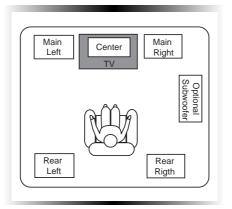
Your system is equipped with Dolby Digital & Digital Theatre System, which enable the unit to reproduce sound effects as they were intended. However, the speakers must be properly positioned and balanced.

In order to enjoy Dolby & Digital Theatre System - enhanced sound quality, five speakers are preferred: One center speaker, left and right main speakers, rear left and right speakers, and an optional subwoofer. However, if your front

speakers are small speakers, then a subwoofer is essential or you will not be able to enjoy enhanced bass effects. Below are a few suggestions for the set up:

- 1. The two main speakers should be set between six and ten feet apart. Putting them any closer or farther apart may result in less satisfactory sound.
- 2. Try to align center speaker and two main speakers, or set the center speaker slightly behind the left and right main speakers, otherwise the surround effect may be less satisfactory.
- 3. Aim the rear speakers directly at the two main speakers, matching height to height. If the room is sparsely decorated, slightly tilt the speakers down to increase sound quality. If the room is densely decorated, face the speakers towards the rear wall at the ceiling.

For more information on speaker setup, please refer to "Fine Setting of the Speakers" on page 12 & "Speaker Distance" on page 13



Actually there are many more possible options. You may experiment repeatedly to find a right balance for you.



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wide patents issued and pending. "DTS Digital Surround", are trademarks of Digital Theater Systems, Inc. Copyright 1996 Digital Theater Systems, Inc. All rights reserved.



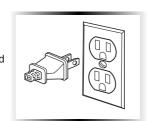
**Dolby Digital** Manufactured

under license from Dolby Laboratories.

"Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.
Copyright 1992-1997 Dolby Laboratories, Inc.
All Rights Reserved.

### **Connecting for Power**

Make sure you connect all your other electronic components and the speakers before plugging your receiver into the outlet. Plug the power cord in the wall outlet, matching the wide blade of the plug with the wide slot in the outlet. Be sure to insert the plug completely.



### **Using Headphones**

To listen privately through your audio system, use the **PHONES** jack on the receiver. However, make sure you turn down the volume before you put on the headphones. Increase the volume to the desired level after headphones are in place.





### **Demo Mode**

Right after you have plugged in the power, a demo message will appear in display. It will also be displayed if you press the **SET/DEMO** at **STANDBY** mode. To restore to normal status, press **SET/DEMO** again to return to **STANDBY** mode.

### **Restore to Factory Settings**

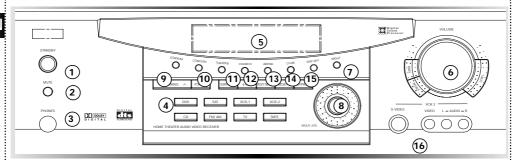
You can always restore all settings back to original state. When the receiver is in STANDBY mode, press accordingly as:

STADIUM → NIGHT → DSP OFF → CLUB

then you can restore everything like preset radio station frequencies, speaker settings, etc, back to the first time you use it.

**Note:** As you turn on the receiver, it will first enter TUNER mode and show frequency as 87.5MHz after the settings have been restored.

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### Receiver Controls

### 1. STANDBY

To turn the unit on/ off. When the system is turned on, the unit will go to the mode it was in before power off.

### 2. MUTE

To mute all audio outputs.

### 3. PHONES

Plug your headphones (not supplied) into it for your private enjoyment. Speakers will be off when phones are Please refer to page 12 for Input inserted

### 4. Source Buttons

To select sound source. For example, CD, SAT etc. In standby mode, they are also One Touch Power On keys to turn on the receiver directly at the source mode you want.

### 5. Display

To display current status of the receiv- 9. TUNING

### 6. Sound Control

Let you adjust the sound - volume, treble, bass & balance. To change the VOLUME, turn the large central knob. To adjust TREBLE or BASS, press relevant button and turn the knob. To change the volume of individual speaker, press **LEVEL** button repeatedly to select the speaker, then turn the knob to adjust the level. ( refer to "The TEST/ SET UP button" on page 12.)

### 7.DSP (Digital Sound Processor) & NIGHT mode

Press corresponding button to select the mode (STADIUM/ CONCERT/ THEATER/ ARENA/ CHURCH/ CLUB/ **OFF)** you want. Press **NIGHT** for your enjoyment at night (see page 12).

### 8. MULTI JOG, SET/DEMO

When pressing the **SET/DEMO** repeatedly, the display will toggle among Audio Source (for DVD, SAT & CD), **SLEEP** mode and **DIM** selection.

Signal Setting. In SLEEP mode, you can set the receiver to turn off after 30, 60, 90 or 120 minutes. In **DIM** selection, you can rotate to set the brightness of the display. Such setting 14. PRESET EQ will be stored. Also use the MULTI JOG for speakers and sub-woofers setup and preset radio stations selec-

Press to select the tuner frequencies

### 10. P. SCAN (Preset Scan)

Press for about 2 seconds and tuner station presets will be started automatically.

### 11. SURR. MODE

Press repeatedly to select the surround mode you want. (refer to "Advanced Sound Control" on page

### 12. 6 CH (6 Channels)

Press to select the input connected to an external 6-Channel decoder. Press again to return to the most recently selected source mode. (see "5.1 ch Input for Dobly Digital" on page 11).

### 13. TEST/ SET UP

When pressing it briefly, a short noise (test tone) will be generated in the speakers one by one so that you can adjust the volume of individual speaker. When keep pressing for two seconds, it will enter setup mode for speakers and subwoofers. Rotate the MULTI JOG to choose the options. (refer to "The TEST/ SET UP button" on page 12.)

Press repeatedly to select the desirable EQ mode (music style) - CLAS-SIC, POP, ROCK, JAZZ, VOCAL or FLAT. Your choice will be saved automatically.

### 15. BYPASS

Press to cut sound output from center, surround speakers.

### 16. VCR2

For convenient use of your digital camera, family game machines, second VCR, etc.

Note: If your video component has S-Video output, you can enjoy enhanced video quality by connecting it to the S-Video jack on receiver using a S-Video cable (not included).

### **Your Remote Control**

Please be sure you have inserted the batteries into the remote control (see relevant section on page 3.) You can test it by pressing any button. If it works, the red LED will light.

### 1. ON/OFF

To turn on or off the receiver and other auxillary components (see page 10 "Using the Remote to Control Additional Components").

### 2. Source Buttons

To turn on and select various audio/video sources. You can also enter the 6 Channels direct input mode by pressing DVD•6CH.

- 3. CH+, CH- (Channel Buttons) To select programmed stations (in TUNER mode).
- 4. VOL (Volume Buttons) To adjust the volume.

To mute all audio outputs.

### 6. Adjustment Buttons

Press AUDIO button to activate the control, then upon pressing OK, the display will toggle among Preset EQ (Stereo only), SLEEP Mode & DIM Mode. When the display shows the setup you want to change, press the left and right arrow buttons beside **OK** button to make changes, then press **OK** to different channels (Left main finalize your choice.

### 7. Number Buttons

To access directly a pre-set station (in TUNER mode).

### 8. MENU

Press to store desired frequency in memory. The flashing word MEM-**ORY** in red will appear in display. Input your desired channel num-

ber while the word is still flashing and the frequency will be stored. (For details, refer to "Storing and Recalling Stations in Memory" on page 10.)

### 9. Operation Buttons

In **TUNER** mode, you can press **REVERSE** and **FORWARD** keys to tune down or up the radio frequency. PLAY, RECORD, STOP and PAUSE keys are for easy control of components (like CD, TV, DVD, TAPE, etc.) other than the receiver itself. What you need is to encode the components in advance. (For details, refer to "Using the Remote to Control AdditionalCcomponents" on page

### 10. DIGITAL

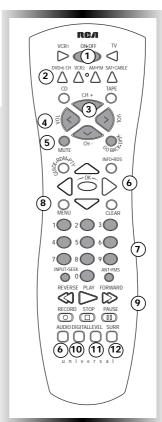
Select the way your audio/video components are connected to the receiver - Analog, Optical, or Coaxial.

### 11 LEVEL

Press to adjust the volume of individual speaker. Press repeatedly and the display will toggle among speaker, Right main speaker, Center speaker, Left surround speaker, Right surround speaker, and/or Subwoofer, if available), then press the left and right arrow buttons beside **OK** button for adjustment.

### 12. SURR (Surround Sound Control)

Press to change the surround



sound settings. The display will toggle among DOLBY DIGITAL, **DOLBY PRO LOGIC, DOLBY 3** STEREO, STEREO and DSP modes.

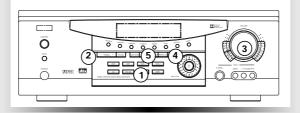
(For details, refer to section "Advanced Sound Control" on page 11.)

Note: The remote buttons GO BACK • DISK, GUIDE • RDM • PTY, INFO•RDS, CLEAR, INPUT•SEEK & ANT•FMS do not work with the receiver.

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# The Built-in Radio

The receiver has built-in AM/FM radio function. You can simply connect it to power and speak-



## Storing and Recalling Stations in Memory

Set to desired frequency by the receiver or remote

control, then press **MENU** on the remote control. The flashing word **MEMORY** in red will appear in display. While the word **MEMORY** is still flashing, input your desired channel number and the frequency will be stored.

Tip: You can store up to 30 stations.

After you have done so, you can rotate the **MULTI JOG** on receiver or press **CH+** or **CH-** buttons on remote to select the preset stations directly.

**Note:** The **CH+** and **CH-** buttons respond only in **TUNER** mode in case you want to switch channels.

1. Select **TUNER**.

2. Tune to your favorite station.

ers to listen to your favorite radio stations.

- 3. Adjust volume.
- 4. Set preset EQ if needed
- 5. Set surround mode if needed.

### Seek Tuning

You can keep pressing one of the **TUNING** buttons on the unit or **REVERSE/FORWARD** buttons on the remote for a second, and the receiver will search for the next available station for you.



# Using the Receiver to Play DVD or CD or Video Cassette Player

After you have connected your DVD or CD or VCR player with the receiver, you can partly control them through your receiver:

- 1. Connect the DVD or CD or VCR player with the receiver. (For details, refer to page 4.)
- 2. Select  $\mbox{\bf DVD}$  or  $\mbox{\bf CD}$  or  $\mbox{\bf VCR}$  according to the source connected.
- 3. Turn on the connected player and start playback.
- 4. Set Preset EQ if needed. (For details, refer to item 11 "Preset EQ" on page 8.)
- 5. Set Surround Mode if needed. (For details, refer to
- "Advanced Sound Control" on page 12)
- 6. Set Night Mode if needed. (For details, refer to "Night Mode" on page 12.)
- 7. Adjust Volume.

# Using the Remote to Control Additional Components

You can set your remote to control other components (like CD, TV, DVD, TAPE, etc.). What you need is to encode them in advance (not necessary for recent RCA & Proscan models)

- $\label{eq:component} \textbf{1.} \ \textbf{Turn on the component to be programmed}.$
- 2. Look up the brand and corresponding code number in the code list from page 15 to 17.
- 3. While keeping the corresponding Source Button (like **VCR1**, **VCR2**, **TV**, **DVD**) on the remote pressed, enter the code from the code list through the Number Buttons.
- 4. Release the component button, then press
  ON-OFF to see if the component will be turned off.
  5. If this does not work, repeat steps 3 and 4 by trying to use the next code (if available) listed for the brand of your component until the component responds to

the remote command.

Note: Once your component is encoded, you can press **ON/OFF** on the remote once to turn off the component and then followed by the second time quickly to turn off the receiver (i.e. this unit). If you only want the receiver to be turned off, select **FM/AM** while the unit is ON before pressing **ON/OFF**.

### Tips:

- $\bullet$  This remote may not operate all models of the brands shown
- If batteries are removed from the battery compartment of the remote control, all memory will be lost. You need to re-enter all previously programmed codes again.
- •The buttons on the remote may not work correspondingly with those on the components brands. Experiment with the remote and your components to see which buttons work. If only a few functions operate, check to see if another code set will work with more buttons.

## Advanced Sound Control

### **Sound Enhancement Systems**

This receiver is equipped with several built-in sound enhancement systems to give you the sound quality you have once dreamed of – but now comes true:

### Dolby Pro Logic and Dolby 3 Stereo

This surround system reproduces theater-like surround sound from Dolby-encoded software. The **Pro Logic** mode uses the built-in circuit to steer the Left, Center, Right and Surround channel audio signals and uses all five speakers and an optional subwoofer to play decoded Dolby Pro Logic program source, such as TV and VCR. The **3 Stereo** mode will redirect the Surround signals to the front left and right speakers when only the front and center speakers are used.

Use this mode to suit your speaker system configurations (such as size and number of speakers) and type of program (such as VCR).

### 5.1 ch Input for Dolby Digital

The Dolby Digital mode lets you enjoy full digital surround from software processed in the Dolby Digital format. Dolby Digital provides better sound quality and more powerful presence than conventional Dolby Surround.

When the soundtrack of a Dolby Digital movie was made, all the sound effects are mixed down to six separate channels of digital audio, and these six channels of independent digital audio are pressed to a single stream of digital data on your DVD. When you play it by your DVD player, the receiver decodes this stream of digital data back to six audio channels for playback.

Dolby Digital is optimal for DVD and SAT.

This unit is equipped with Dolby Digital 5.1-channel input terminal so that you can enjoy enhanced full digital surround sound. Being different from Dolby Pro Logic in which only four channels (Front Left, Front Right, Centre and Rear) are used, the new system provides stereo separation of the rear speakers (Rear-Right, Rear-Left). These 5 channels, together with the subwoofer channel for bass sounds (counted as 0.1 channel), constitue as 5.1-Channel (or 6 Channels) Input for Dolby Digital that brings you the most sophisicated sound enjoyment.

Press 6 CH on the unit or DVD•6 CH button on the remote to select the input connected to an external 6-channel decoder. Press again return to the most recently selected mode. You can only adjust Sound Control, SLEEP mode, DIM selection, Source Buttons and MUTE when this mode is selected.

### Stereo

The Stereo mode uses the two main channel outputs from the front speakers. Use this mode if you have connected the front speakers only.

### **DSP** (Digital Sound Processor)

These digital sound effects resemble sounds in a real environment such as Stadium, Concert, Theater, Arena, Church, Club. **DSP** automatically converts analog audio signals to digital ones which enables you to adjust the sound without degrading the sound quality. Different modes will give you different feel of size and type of listening environment.

# Advanced Sound Control

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### Night Mode

By using Dynamic Range Compression technology, you can enjoy enhanced sound quality by Dolby Digital at night without interrupting your roommates or neighbors. While enjoying a Dolby Digital enabled component (DVD, SAT), you can activate Night Mode by pressing NIGHT button at the front of the receiver, and this mode will compress the difference in volume between normal voices and sounds like explosions. There are two modes (SOFT, SOFTER) for you to choose the extents of compression.

### Fine Setting of the Components Input IQ

One of the smartest features of the receiver is the ability to pre-select the best surround mode for you once you turn on the unit by pressing the Source Buttons (like DVD, SAT, CD) directly. The default surround modes for different components are as table below. If you decide to change the surround mode, you can press the SURR MODE button to change to the mode you want.

Source/ Input	If Digital Input (optical or coaxial) is selected	
DVD	Dolby Digital	PRO LOGIC
SAT	Dolby Digital	PRO LOGIC
VCR1	N/A	PRO LOGIC
VCR2	N/A	PRO LOGIC
TV	N/A	PRO LOGIC
CD	STEREO	STEREO
TAPE	N/A	STEREO
TUNER	N/A	STEREO

### Smart Detect

After you have connected all the optical/ coaxial wires from your digital components (e.g. SAT, DVD), this function can automatically detect the inputting signals and arrange the optimum settings for you. Tables below show changes in settings as seen on display with digital and analog inputs:

DVD CD	Optical 2 (DVD/ OPT1) Coaxial (CD/ COAX)
Input Source	Analog input (as seen on display)
SAT DVD CD	SAT analog (SAT/ ANL) DVD analog (DVD/ ANL) CD analog (DVD/ ANL)

Digital input (as seen on display)

Optical 1 (SAT/ OPT2)

You may also change the default settings if your connections are different from our recommendation (CD-Coaxial, SAT- Optical 1 and DVD- Optical 2) by turning off the smart detect function.

- 1. Press and hold TEST/ SET UP until L/R SML shows on display
- 2. Press TEST/ SET UP repeatedly until SDET ON shows on display
- 3. Rotate MULTI JOG to turn off (SDET OFF) smart detect.

Now you can arrange your favourite settings by pressing **SET/DEMO** and then rotate **MULTI JOG** to select among optical/ coaxial/ analog inputs. Your selection will be stored automatically.

### Fine Setting of the Speakers

This receiver supports a wide range of speakers and subwoofers. For optimal surround sound enjoyment, you need to register the speaker selection settings of your audio system. If you buy this receiver with accompanied speaker package, then this step has been done for you.

Also, to make the surround sound more effective and suit the acoustic conditions in your listening room, you need to delay the signal from some of the speakers. Such channel delay compensates for center or surround speakers that are closer to listening position than the front speakers. You can make use of the TEST/ SET UP button to control the speakers such as their relative loudness.

### The TEST/ SET UP button

You can adjust the relative loudness of the individual speakers by TEST/ SET UP button. In Dolby modes, press the button briefly. A short noise will be heard in the speakers one by one. The speaker having the noise at that moment will be shown in the display. You can listen to that speaker and rotate the MULTI JOG to adjust the level.

### Speaker Configurations

You can also change the setup of the speakers by pressing the TEST/ SET UP button until the display shows L/R IRG which enables you to set the volume size of the front speaker.

# Advanced Sound Control

Front Speaker selection
Center Speaker selection
Surround Speaker selection
Subwoofer selection
Subwoofer Phase
Front Speaker distance
Centre Speaker distance
Rear Speaker distance
Control Speaker Speaker distance
Control Speaker Speak

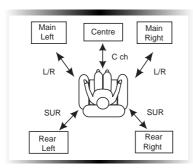
By pressing the button repeatedly while display is still showing LR IRG, the display will toggle among: front, center, surround, subwoofer, subwoofer phase and speakers' distance setup. You can now set the volume size or speakers' distance by rotating the **MULTI JOG**.

### Note:

- The sub-woofer selection will always be YES when the main speakers are set to small (SML).
- For the subwoofer phase setting, it will be affected by how you locate the subwoofer. Try both + and settings and select the one that has better bass effect.

### Speaker Distance

To make the surround sound more effective and suit the acoustic conditions in your listening room, you need to input the distance of the speakers measured from your favourite listening position. The receiver will adjust the appropriate delay compensation for you.



Note: The receiver has defaulted the following distances:

Main speakers (L/R) 15 ft Center speaker (Cch)\* 15 ft Rear speaker (SUR) 10 ft

(\* Center speaker is available only when Dolby Digital is active)

### Speaker Icons

The receiver shows you the speakers' types and settings on the display with the following icons:



### **Displaying Program Formats**

When a digital source is playing, the receiver will automatically switch to the proper surround mode and indicates on the speaker icons on the right-hand side of the display. (See diagram)

It is important to note, however, that not all Dolby Digital sources are encoded with the full complement of five channels plus LFE\*. Speaker icons show how many and which speaker you have enabled (See "Fine Setting of the Speakers") and the



EN

letters inside the speaker icons show which channel is present in the source information. For example, the diagram shown means you have all the five speakers and subwoofer enabled and the digital sources you played have five channels plus LFE complemented.

\* LFE stands for Low Frequency Effect. The indication "LFE" appears if the digital source contains LFE information. In this case, the bass signal will be delivered to the subwoofer, offering more dynamic deep bass sound effects. If the letter is flashing, the signal is either too weak or just cone.



## Care and Maintenance



## Troubleshooting Tips Receiver/Tuner Operation

### STEREO indicator is off.

· Adjust the antenna.

### The signal is Mono. Severe hum or noise.

The signal is too weak. Connect an external antenna

### Remote Control Operation

### The remote control does not operate the unit.

- Another function mode is selected on the remote. Press the correct Source Button.
- No batteries installed. (included with your system)
  Install the batteries before attempting to operate the
  remote. Be sure to match the + and ends of each
  battery to the symbols shown in the remote battery
  compartment.
- The batteries are weak. Replace all batteries.
- The remote is not pointed at the remote control sensor on the main unit or there is an obstacle between the remote and the main unit.
- The remote control is too far from the main unit, move closer.

### General

### No audio.

- Make sure the speakers are connected.
- Check the connections.
- Check the power cord connections.
- Make sure the **MUTE** indicator on the front panel is off.
- Make sure the digital setting (optical, coaxial or analog) is correct.
- Check if connections is different from recommendation when SDET is ON (see p.12 Smart Detect).

### No audio from one channel.

- Check the speaker level setting.
- · Check the speaker wire or cable connections.

### Noise creates when the TV is turned on.

• The TV is too close to the audio system.

### Specific instruments sound displaced.

- Check the connections between the receiver and the speakers if the sound does not match the video.
- Press the Source Button for the video source.

### Cleaning the Exterior

 Disconnect the system from AC power before cleaning the exterior of the system with a soft dust cloth, or with a slightly humid chamois leather. Never use strong solvents.

### **Equipment Specifications:**

### **AMPLIFIER SECTION:**

All 5 channels: each 100W at 6 ohm. 0.9% THD @1 kHz

Subwoofer channel: 200w at 3 ohm (RT2500 only)

Muting Attenuation: 65dB

Frequency Response: 40Hz to 20kHz +/-3dB Signal to Noise Ratio: 65dB (Bypass mode)

### VIDEO SECTION:

Input (Sensitivity/Impedance):1Vp-p/75ohm Output (Level/Impedance): 1Vp-p/75 ohm Frequency Response: 10Hz to 6MHz at +/- 3dB

Signal to noise ratio: 40dB Crosstalk @3.58MHz: 40dB

### AM TUNER SECTION:

Frequency Response: 80Hz – 2kHz +/-6dB Usable Sensitivity: 800uV/m @ S/N 20dB

Signal to Noise: 38dB

Image Ratio: 27dB @ 1000kHz

IF Rejection: 35dB

### FM TUNER SECTION:

Frequency Response: 40Hz - 15kHz +/-3dB

Quieting: 24dBu

Signal to Noise: 60dB(stereo)/ 65dB(mono)

Image Ratio: 40dB IF Rejection: 50dB

# Remote Codes

### **CABLE CODES**

ZENITH

5002, 5003, 5004, 5005, 5006, 5009, 5053 ANTRONIX 5008, 5009 ARCHER CABLETENNA 5008, 5009, 5010, 5011 5008 CABLEVIEW CENTURY 5008 5011 CITIZEN 5011 COLOUR VOICE 5012, 5013 COMTRONICS 5014, 5015 CONTEC EASTERN 5016 5017 GARRARD GC ELECTRONICS 5011 5009 GEMINI GENERAL INSTRUMENT 5018, 5019, 5049 5003 5020, 5021, 5022, 5035, 5045 HITACHI 5003 **HYTEX** 5002 JASCO 5011 JERROLD 5003, 5005, 5007, 5018, 5023, 5024, 5046, 5053 MAGNAVOX 5025 MEMOREX 5026 5002, 5027, 5028 MOVIE TIME NSC 5002, 5027, 5028 OAK PANASONIC 5002, 5016, 5029 5048, 5052 5046, 5032 5026 5011, 5012, 5013, 5019, 5025, 5030, 5031, 5032 PARAGON PHILIPS PIONFFR 5033, 5034 PULSAR 5026 5047, 5049, 5052 RCA REALISTIC 5009, 5049 REGAL REGENCY 5022, 5035 5017 REMBRANDT 5003 RUNCO 5026 SAMSUNG 5014, 5034 SCIENTIFIC ATLANTA 5006, 5036, 5037, 5038 5014, 5018 SIGNAL SIGNATURE SL MARX 5003 5014 SPRUCER STARCOM 5052 5007, 5018, 5053 STARGATE 5014, 5018 STARQUEST 5018 TANDY 5040 TELEVIEW 5014 TOCOM 5004, 5023, 5041 TOSHIBA TUSA 5026 5018 TV86 UNIKA 5008, 5009, 5011 UNITED ARTISTS 5002 UNITED CABLE 5053 UNIVERSAL 5008, 5009, 5010, 5011 VIDEOWAY VIEWSTAR 5044 5015, 5025, 5027, 5040

5026, 5050, 5051

## **VCR CODES**

MARTA MASUSHITA

MEI

ADMIRAL 2131 2026 2027 ADVENTURA AIKO AIWA 2002, 2026 AKAI AMERICAN HIGH 2003, 2004, 2005, 2007, 2008, 2111, 2112, 2113 2021 AMERICAN HIGH ASHA AUDIO DYNAMICS AUDIOVOX BELL & HOWELL BEAUMARK BROKSONIC CALIX 2013 2009, 2010 2014 2011 2013 2012, 2025 2014 CANDLE 2013, 2014, 2015, 2016, 2017, 2018, 2019 2021, 2022, 2114 CANON CAPEHART CARVER 2020, 2110 2062 2027, 2061 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2027 CITIZEN COLORTYME 2009 COLT 2061 2013, 2014, 2023, 2061 2000, 2002, 2009, 2013, 2016, 2018, 2021, 2022, 2024, 2115 **CURTIS-MATHES** CYBERNEX 2013 2015, 2017, 2019, 2025, 2026, 2027, 2028, 2110 DAEWOO DAYTRON 2110 DBX DIMENSIA 2009, 2010 2000 DYNATECH 2002 2026 ELECTROPHONIC 2014, 2029 2014 2002 2012 2014 2015 2021 2024 2025 2026 **EMFRSON** 2002, 2012, 2014, 2015, 2021, 2024, 2024, 2025, 2026, 2029, 2030, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2044, 2045, 2047, 2065, 2105, 2113, 2116, 2117, 2130 2011, 2023, 2048, 2049, 2050, 2051, 2052, 2118 2021, 2119 FISHER FUJI FUNAL 2002, 2026 GARRARD GE 2000, 2001, 2013, 2021, 2022, 2053, 2115, 2120 GOLDSTAR GRADIENTE 2009, 2014, 2018, 2054, 2121 2026 HARLEY DAVIDSON 2026 HARMAN KARDON HARWOOD 2009 2061 HEADOUARTER 2011 2002, 2055, 2056, 2057, 2107, 2111, 2120, 2122 HI-O 2023 INSTANT REPLAY 2021 JCI JC PENNEY 2009 2010 2011 2013 2014 2021, 2022, 2055, 2056, 2058, 2059, 2060, 2107, 2118 JENSEN 2055, 2056, 2111 2009, 2010, 2011, 2018, 2058, 2111, 2123 2009, 2010, 2011, 2016, 2018, 2058, 2111, 2123 KENWOOD KLH 2061 KODAK LLOYD LOGIK 2014, 2021 2002, 2026 2061 LXI MAGNAVOX 2014 2021, 2022, 2062, 2063, 2104, 2108, 2124 MAGNIN MARANTZ 2009, 2010, 2011, 2016, 2018, 2021, 2058, 2062, 2064 2014

2021

# Remote Codes

FN

MEMOREX	2002, 2011, 2013, 2014, 2021, 2023, 2026,	XR-1000	2021, 2026, 2061
	2104, 2131	YAMAHA	2009, 2010, 2011, 2018, 2058, 2111
MGA	2029, 2065, 2113	ZENITH	2004, 2098, 2104, 2119, 2128
MGN TECHNOLOGY MIDLAND	2013 2053		
MINOLTA	2055, 2056, 2107	TV CODES	
MITSUBISHI	2029, 2055, 2056, 2065, 2066, 2067, 2069,	IV CODES	
	2070, 2071, 2072, 2073, 2074, 2106, 2113,	ABEX	1172
MONTGOMERY WARD	2123 2075, 2131	ADMIRAL	1001, 1173
MOTOROLA	2021, 2131	ADVENTURA	1174
MTC	2002, 2013, 2026	AIKO	1016
MULTITECH	2002, 2013, 2016, 2026, 2053, 2061	AKAI ALLERON	1002 1046
NEC	2009, 2010, 2011, 2016, 2018, 2058, 2064, 2076, 2078, 2079, 2111, 2123	AMTRON	1038
NIKKO	2014	ANAM NATIONAL	1003, 1038
NOBLEX	2013	AOC	1004, 1005, 1006, 1007, 1175, 1176
OLYMPUS	2021	AUDIOVOX BELCOR	1038 1004
OPTIMUS OPTONICA	2014, 2131 2096	BELL & HOWELL	1001, 1083, 1162
ORION	2035	BRADFORD	1038
PANASONIC	2021, 2022, 2109, 2125, 2126, 2127	BROKWOOD	1004
PENTAX	2016, 2055, 2056, 2107, 2120	CANDLE CAPEHART	1004, 1006, 1008, 1174 1175
PENTEX RESEARCH PHILCO	2018 2021, 2022, 2062, 2063	CELEBRITY	1002
PHILIPS	2021, 2062, 2096, 2124	CENTURION	1009
PILOT	2014	CITIZEN	1004, 1006, 1008, 1016, 1038, 1105, 1171,
PIONEER	2010, 2055, 2080, 2081, 2123	CLAIRTONE	1174, 1177 1176
PORTLAND PROSCAN	2016, 2017, 2019, 2110 2000, 2001	COLORTYME	1004, 1006
PROTEC	2061	CONCERTO	1004, 1006
PULSAR	2104	CONTEC/CONY	1012, 1013, 1014, 1038, 1176
QUARTER QUARTZ	2011	CRAIG CROWN	1038 1038, 1171
QUASAR	2011 2021, 2022, 2125	CURTIS MATHES	1000, 1004, 1006, 1015, 1105, 1162, 1171
RCA	2000, 2001, 2003, 2013, 2021, 2055, 2056,	CXC	1038
	2082, 2083, 2084, 2085, 2086, 2087, 2088,	DAEWOO	1004, 1005,1006, 1016, 1017, 1018, 1127,
RADIOSHACK/REALISTIC	2089, 2090, 2091, 2107, 2115, 2120, 2125 2002, 2011, 2013, 2014, 2021, 2022, 2023,	DAYTRON	1171 1004, 1006, 1171
RADIOSHACK/REALISTIC	2026, 2029, 2049, 2050, 2096, 2131	DIMENSIA	1000
RADIX	2014	DUMONT	1004, 1151
RANDEX	2014	DYNATECH	1178
RICOH RUNCO	2128 2104	ELECTROBAND ELECTROHOME	1002, 1176 1003, 1004, 1006, 1019, 1022
SAMSUNG	2005, 2013, 2015, 2033, 2053, 2112	EMERSON	1004, 1006, 1012, 1014, 1023, 1024,
SANKY	2104, 2131		1025, 1026, 1027, 1028, 1029, 1030,
SANSUI	2010, 2092, 2111, 2123		1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1041, 1042, 1043, 1044, 1046,
SANYO SCOTT	2011, 2013, 2023 2012, 2015, 2025, 2032, 2035, 2038, 2065,		1047, 1123, 1124, 1162, 1171, 1176, 1177,
30011	2093, 2116		1179, 1191
SEARS	2011, 2014, 2021, 2023, 2048, 2049, 2050,	ENVISION	1004, 1006
CLIADO	2051, 2055, 2056, 2107, 2118	FISHER FUJITSO	1048, 1049, 1050, 1051, 1162, 1180 1046
SHARP SHINTOM	2002, 2017, 2029, 2094, 2095, 2096, 2131 2004, 2056, 2061, 2098	FUNAI	1038, 1046
SHOGUN	2013	FUTURETEC	1038
SIGNATURE	2002, 2131	GE	1000, 1003, 1004, 1006, 1022, 1052, 1054,
SINGER SONY	2021, 2061, 2128		1055, 1087, 1164, 1165, 1166, 1167, 1168, 1181
STS	2002, 2004, 2098, 2099, 2119, 2128 2021, 2107	GIBRALTER	1004, 1151
SYLVANIA	2002, 2021, 2022, 2026, 2062, 2063, 2065,	GOLDSTAR	1004, 1005, 1006, 1012, 1019, 1056, 1057,
CVA ADLICANIC	2124	GRUNDY	1058, 1155, 1156, 1171, 1172 1038, 1046, 1171
SYMPHONIC TANDY	2002, 2026 2002, 2011	HALLMARK	1004, 1006
TASHIKO	2014	HARVARD	1038
TATUNG	2058, 2111	HITACHI	1004, 1006, 1012, 1013, 1059, 1060, 1061,
TEAC	2002, 2026, 2058, 2085, 2111		1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1148, 1150,
TECHNICS TEKNIKA	2021, 2109 2002, 2014, 2021, 2026, 2100, 2129		1179
TMK	2013, 2024, 2047	IMA	1038
TOSHIBA	2015, 2049, 2051, 2055, 2065, 2093, 2116	INFINITY	1062
TOTEVSION	2013, 2014	JANEIL JBL	1174 1062
UNITECH VECTOR RESEARCH	2013 2009, 2010, 2015, 2016	JCB	1002
VICTOR	2010	JC PENNY	1000, 1004, 1005, 1006, 1008, 1022, 1052,
VIDEO CONCEPTS	2009, 2010, 2015, 2016, 2113		1054, 1058, 1063, 1064, 1072, 1087, 1105, 1128, 1171, 1172, 1181
VIDEOSONIC WARDS	2013 2002, 2013, 2014, 2015, 2021, 2023, 2026,	JENSEN	1004, 1006
/1105	2029, 2055, 2056, 2061, 2096, 2101, 2102,	JVC	1012, 1013, 1054, 1060, 1065, 1066, 1067,
	2103, 2107, 2116, 2131		1089, 1157, 1158, 1159, 1182

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# Remote Codes

KAWASHO	
	1002, 1004, 1006
KAYPANI	1175
KENWOOD	1004, 1006, 1019
KLOSS NOVABEAM	1068, 1069, 1174, 1183
KTV	1038, 1070, 1171, 1176, 1177
LOEWE	1062
LOGIK	1083
LUXMAN	1004, 1006
LXI	1000, 1006, 1049, 1062, 1071, 1072, 1073,
	1162, 1181
MAGNAVOX	1004, 1006, 1008, 1019, 1062, 1068, 1069,
	1074, 1075, 1076, 1077, 1088, 1089, 1130,
	1131, 1132, 1133, 1134, 1183, 1184
MAJESTIC	1083
MARANTS	1062
MARANTZ	1004, 1006, 1062, 1078
MEGATRON	1006, 1059
MEI	1176
MEMOREX	1001, 1006, 1082, 1083, 1162
MGA	1004, 1005, 1006, 1019, 1022, 1051, 1079,
	1080, 1082
MIDLAND	1054, 1151, 1171, 1172, 1181
MINUTZ	1052
MITSUBISHI	1004, 1005, 1006, 1019, 1022, 1051, 1079,
	1080, 1081, 1082, 1082, 1083, 1125
MONTGOMERY WARD	1083
MOTOROLA	1003, 1173
MTC	1004, 1005, 1006, 1105, 1176, 1178
MULTITECH	1038, 1178
MULTIVISION	1084
NAD	1006, 1071, 1072, 1185
NEC	1003, 1004, 1005, 1006, 1089
NIKKO	1006, 1016
NTC	1016
ONWA	1038
OPTIMUS	1185
OPTONICA	1095, 1173
ORION	1035, 1191
PANASONIC	1003, 1054, 1062, 1170
PHILCO	1003, 1004, 1005, 1006, 1008, 1012, 1019,
	1062, 1068, 1069, 1074, 1075, 1077, 1183,
	1184
PHILIPS	1003, 1004, 1008, 1012, 1019, 1062, 1068,
	1069, 1074, 1075, 1076, 1086, 1087, 1088,
	1089
PILOT	1004, 1171
PIONEER	1004, 1006, 1090, 1091, 1092, 1179, 1185
PORTLAND	1004, 1005, 1006, 1016, 1171
PRICE CLUB	1105
PRISM	
	1054
	1054
PROSCAN	1054 1000, 1181
PROSCAN PROTON	1054
PROSCAN PROTON PULSAR	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151
PROSCAN PROTON	1054 1000, 1181 1004, 1006, 1012, 1093, 1175
PROSCAN PROTON PULSAR PULSER	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094
PROSCAN PROTON PULSAR PULSER QUASAR	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095,
PROSCAN PROTON PULSAR PULSER QUASAR	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172
PROSCAN PROTON PULSAR PULSER QUASAR RADIO SHACK/REALISTIC	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103,
PROSCAN PROTON PULSAR PULSER QUASAR RADIO SHACK/REALISTIC	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103,
PROSCAN PROTON PULSAR PULSER QUASAR RADIO SHACK/REALISTIC	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019,
PROSCAN PROTON PULSAR PULSER OUASAR RADIO SHACK/REALISTIC RCA	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103, 1129, 1179, 1181, 1187, 1188, 1190
PROSCAN PROTON PULSAR PULSER OUASAR RADIO SHACK/REALISTIC RCA RHAPSODY	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103, 1129, 1179, 1181, 1187, 1188, 1190
PROSCAN PROTON PROTON PULSAR PULSER QUASAR RADIO SHACK/REALISTIC RCA RHAPSODY RUNCO	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103, 1129, 1179, 1181, 1187, 1188, 1190
PROSCAN PROTON PROTON PULSAR PULSER QUASAR RADIO SHACK/REALISTIC RCA  RHAPSODY RUNCO SAMPO	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103, 1129, 1179, 1181, 1187, 1188, 1190 1176 1151 11004, 1006, 1171, 1172, 1175
PROSCAN PROTON PROTON PULSAR PULSER QUASAR RADIO SHACK/REALISTIC RCA  RHAPSODY RUNCO SAMPO	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103, 1129, 1179, 1181, 1187, 1188, 1190 1176 1151 1004, 1006, 1171, 1172, 1175 1004, 1005, 1006, 1012, 1015, 1019, 1104,
PROSCAN PROTON PROTON PULSAR PULSER QUASAR RADIO SHACK/REALISTIC RCA  RHAPSODY RUNCO SAMPO SAMSUNG	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103, 1129, 1179, 1181, 1187, 1188, 1190 1176 1151 1004, 1006, 1171, 1172, 1175 1004, 1005, 1006, 1012, 1015, 1019, 1104, 1105, 1106, 1171, 1172
PROSCAN PROTON PROTON PULSAR PULSER QUASAR RADIO SHACK/REALISTIC RCA  RHAPSODY RUNCO SAMPO SAMSUNG SAMSUX	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103, 1129, 1179, 1181, 1187, 1188, 1190 1176 1151 1004, 1006, 1171, 1172, 1175 1004, 1005, 1006, 1012, 1015, 1019, 1104, 1105, 1106, 1171, 1172 1171 1191 1004, 1048, 1049, 1050, 1080, 1107, 1108,
PROSCAN PROTON PROTON PULSAR PULSER QUASAR RADIO SHACK/REALISTIC RCA  RHAPSODY RUNCO SAMPO SAMSUNG SAMSUX SANSUI SANYO	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103, 1129, 1179, 1181, 1187, 1188, 1190 1176 1151 1004, 1006, 1171, 1172, 1175 1004, 1005, 1006, 1012, 1015, 1019, 1104, 1105, 1106, 1171, 1172 1171 1191 11004, 1048, 1049, 1050, 1080, 1107, 1108, 1162, 1169, 1180, 1189
PROSCAN PROTON PROTON PULSAR PULSER QUASAR RADIO SHACK/REALISTIC RCA RHAPSODY RUNCO SAMPO SAMSUNG SAMSUNG SANSUI SANYO SCOTCH	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103, 1129, 1179, 1181, 1187, 1188, 1190 1176 1151 1004, 1006, 1171, 1172, 1175 1004, 1005, 1006, 1012, 1015, 1019, 1104, 1105, 1106, 1171, 1172 1171 1191 1004, 1048, 1049, 1050, 1080, 1107, 1108, 1162, 1169, 1180, 1189 1006
PROSCAN PROTON PROTON PULSAR PULSER QUASAR RADIO SHACK/REALISTIC RCA  RHAPSODY RUNCO SAMPO SAMSUNG SAMSUNG SANSUI SANYU SCOTCH SCOTT	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103, 1129, 1179, 1181, 1187, 1188, 1190 1176 1151 1004, 1006, 1171, 1172, 1175 1004, 1005, 1006, 1012, 1015, 1019, 1104, 1105, 1106, 1171, 1172 1171 1191 11004, 1048, 1049, 1050, 1080, 1107, 1108, 1162, 1169, 1180, 1189 1006 1006
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PROSCAN PROTON PROTON PULSAR PULSER QUASAR RADIO SHACK/REALISTIC RCA  RHAPSODY RUNCO SAMPO SAMSUNG SAMSUNG SANSUI SANYU SCOTCH SCOTT	1054 1000, 1181 1004, 1006, 1012, 1093, 1175 1151 1004 1003, 1054, 1070, 1094 1000, 1004, 1006, 1012, 1038, 1049, 1095, 1162, 1171, 1172 1000, 1003, 1004, 1005, 1006, 1007, 1019, 1096, 1098, 1099, 1100, 1101, 1102, 1103, 1129, 1179, 1181, 1187, 1188, 1190 1176 1151 1004, 1006, 1171, 1172, 1175 1004, 1005, 1006, 1012, 1015, 1019, 1104, 1105, 1106, 1171, 1172 1171 1191 1004, 1048, 1049, 1050, 1080, 1107, 1108, 1162, 1169, 1180, 1189 1006 1004, 1006, 1012, 1024, 1035, 1038, 1046 1000, 1004, 1006, 1013, 1019, 1046, 1048, 1049, 1050, 1051, 1066, 1071, 1072, 1109, 1110, 1162, 1180, 1181, 1189 1004, 1006, 1012, 1026, 1071, 1072, 1109, 1101, 1162, 1180, 1181, 1189 1004, 1006, 1012, 1029, 1095, 1111, 1112, 1100, 1101, 1100, 1001, 1001, 1101, 1181, 1189
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DRAKE	5058, 5059
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GENERAL INSTRUMENTS	5060, 5061, 5
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	5075
PRIMESTAR DBS	5076
PROSCAN SATELLITE RECEIVE	R
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RCA SATELLITE RECEIVER	5000, 5001
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SONY SATELLITE RECEIVER	5072
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STS2	5065
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STS4	5067
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### Audio (RCA/Dimensia only)

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AUX	4004
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CD	4007
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CA.	2001



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### What your warranty covers:

· Any defect in materials or workmanship.

### For how long after your purchase:

One year.

(The warranty period for rental units begins with the first rental or 45 days from date of shipment to the rental firm, whichever comes first.)

### What we will do:

- Provide you with a new, or at our option, a refurbished unit.
- The exchange unit is under warranty for the remainder of the original product's warranty period.

### How to make a warranty claim:

- Properly pack your unit. Include any cables, etc., which were originally provided with the product.
   We recommend using the original carton and packing materials.
- Include in the package evidence of purchase date such as the bill of sale. Also print your name and address and a description of the defect. Send standard UPS or its equivalent to:

Thomson Consumer Electronics, Inc. Product Exchange Center 11721 B Alameda Ave. Socorro, TX 79927

- Pay any charges billed to you by the Exchange Center for service not covered by the warranty.
- Insure your shipment in case of loss of damage. Thomson accepts no liability in case of damage or loss.
- A new or refurbished unit will be shipped to you prepaid freight.

### What your warranty does not cover:

- Customer instruction. (Your Owner's Manual provides information regarding operating instructions and user controls. For additional information, ask your dealer.)
- · Installation and set-up service adjustments.
- Ratteries
- · Damage from misuse or neglect.
- Products which have been modified or incorporated into other products.
- Products purchased or serviced outside the USA.
- · Acts of God, such as but not limited to lightning damage.

### **Product Registration:**

• Please complete and mail the Product Registration Card packed with your unit. It will make it easier to contact you should it ever be necessary. The return of the card is not required for warranty coverage.

### How state law relates to this warranty:

• This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

### If you purchased your product outside the USA:

• This warranty does not apply. Contact your dealer for warranty information.

ΕN

## **Canadian Warranty**



Thomson Consumer Electronics Canada, Inc. warrants to the purchaser or gift recipient that if any manufacturing defect becomes apparent in this product within 1 year from the original date of purchase, it will be replaced free of charge, including return transportation.

This warranty does not include damage to the product resulting from accidents, misuse or leaking batteries. Should your product not perform properly during the warranty period, either:

1. Return it to the selling dealer with proof of purchase for replacement,

OR

- 2. Remove the batteries (where applicable), and pack product complete with accessories in the original carton (or equivalent).
  - Mail prepaid (with proof of purchase) and insured to:

Thomson Consumer Electronics Canada, Inc.

**Distribution Centre** 

6200 Edwards Blvd

Mississauga, Ontario L5T 2V7

The provisions of this written warranty are in addition to and not a modification of or subtraction from the statutory warranties and other rights and remedies contained in any applicable legislation, and to the extent that any such provisions purport to disclaim, exclude or limit any such statutory warranties and other rights and remedies, such provisions shall be deemed to be amended to the extent necessary to comply therewith. If you are unable to find a qualified technician for out of warranty service, you may write to:

Thomson Consumer Electronics Canada, Inc.

P.O. Box 0944

Indianapolis, Indiana, U.S.A., 46206-0944

Attach your sales receipt to this booklet for future reference. This information is required if service is needed during the warranty period.

PURCHASE DATE		
NAME OF STORE		